

**Medical Care Collection Fund (MCCF)
Electronic Data Interchange (EDI)
Transaction Applications Suite (TAS)**

ePharmacy Build 23

**Electronic Claims Management Engine BPS*1.0*35
Outpatient Pharmacy PSO*7.0*702
Integrated Billing IB*2.0*712
Pharmacy Data Management PSS*1.0*260**

**Deployment, Installation, Back-out, and Rollback
Guide**



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Revision History

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May 2023	1.0	Initial Version	EDI TAS ePharmacy Development Team

Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all those activities. Its purpose is to provide clients, stakeholders, and support personnel with a smooth transition to the new product or software, and should be structured appropriately, to reflect particulars of these procedures at a single or at multiple locations.

Per the Veteran-focused Integrated Process (VIP) Guide, the Deployment, Installation, Back-out, and Rollback Plan is required to be completed prior to Critical Decision Point #2 (CD #2), with the expectation that it will be updated throughout the lifecycle of the project for each build, as needed.

Table of Contents

1	Introduction	1
1.1	Purpose	1
1.2	Dependencies	1
1.3	Constraints	1
2	Roles and Responsibilities	1
3	Deployment	2
3.1	Timeline	2
3.2	Site Readiness Assessment	2
3.2.1	Deployment Topology (Targeted Architecture)	2
3.2.2	Site Information (Locations, Deployment Recipients)	3
3.2.3	Site Preparation	3
3.3	Resources	3
3.3.1	Facility Specifics	3
3.3.2	Hardware	3
3.3.3	Software	3
3.3.4	Communications	4
3.3.4.1	Deployment / Installation / Back-out Checklist	4
4	Installation	5
4.1	Pre-installation and System Requirements	5
4.2	Platform Installation and Preparation	5
4.3	Download and Extract Files	5
4.4	Database Creation	5
4.5	Installation Scripts	5
4.6	Cron Scripts	5
4.7	Access Requirements and Skills Needed for the Installation	5
4.8	Installation Procedure	6
4.9	Installation Verification Procedure	6
4.10	System Configuration	6
4.11	Database Tuning	6
5	Back-out Procedure	6
5.1	Back-out Strategy	6
5.1.1	Mirror Testing or Site Production Testing	6
5.1.2	After National Release but During the Designated Support Period	6
5.1.3	After National Release and Warranty Period	7
5.2	Back-out Considerations	7
5.2.1	Load Testing	7
5.2.2	User Acceptance Testing	7
5.3	Back-out Criteria	11
5.4	Back-out Risks	11

5.5	Authority for Back-out.....	11
5.6	Back-out Procedure.....	11
5.7	Back-out Verification Procedure	12
6	Rollback Procedure	12
6.1	Rollback Considerations.....	12
6.2	Rollback Criteria	12
6.3	Rollback Risks	12
6.4	Authority for Rollback	12
6.5	Rollback Procedure	12
6.6	Rollback Verification Procedure.....	12

List of Tables

Table 1:	Deployment, Installation, Back-out, and Rollback Roles and Responsibilities	1
Table 2:	Site Preparation	3
Table 3:	Facility-Specific Features	3
Table 4:	Hardware Specifications	3
Table 5:	Software Specifications.....	4

1 Introduction

This document describes how to deploy and install the multi-build BPS PSO IB PSS BUNDLE 23.0 (includes BPS*1.0*35, PSO*7.0*702, IB*2.0*712, and PSS*1.0*260) and how to back-out the product and rollback to a previous version or data set.

1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the multi-build BPS PSO IB PSS BUNDLE 23.0 (includes BPS*1.0*35, PSO*7.0*702, IB*2.0*712, and PSS*1.0*260) will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

1.2 Dependencies

- BPS*1*19, BPS*1*31, and BPS*1*32 must be installed BEFORE BPS*1*35.
- PSO*7*648 and PSO*7*681 must be installed BEFORE PSO*7*702.
- IB*2*649, IB*2*711, and IB*2*727 must be installed BEFORE IB*2*712.
- PSS*1*90 must be installed BEFORE PSS*1*260.

1.3 Constraints

This patch is intended for a fully patched VistA system.

2 Roles and Responsibilities

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
1	VA OIT, VA OIT Health Product Support, and PMO (Leidos)	Deployment	Plan and schedule deployment (including orchestration with vendors)	Planning
2	Local VAMC and CPAC processes	Deployment	Determine and document the roles and responsibilities of those involved in the deployment.	Planning
3	Field Testing (Initial Operating Capability - IOC), Health Product Support Testing, and VIP Release Agent Approval	Deployment	Test for operational readiness	Testing

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
4	Health Product Support and Field Operations	Deployment	Execute deployment	Deployment
5	Individual Veterans Administration Medical Centers (VAMCs)	Installation	Plan and schedule installation	Deployment
6	VIP Release Agent	Installation	Ensure authority to operate and that certificate authority security documentation is in place	Deployment
7	N/A	Installation	Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes	N/A; only existing VistA system will be used
8	VA's eBusiness team	Installations	Coordinate training	Deployment
9	VIP Release Agent, Health Product Support, and the development team	Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)	Deployment
10	VA OIT, VA OIT Health Product Support, and MCCF EDI TAS Development Team (SAIC)	Post Deployment	Hardware, Software, and System Support	Warranty

3 Deployment

The deployment is planned as a national rollout.

This section provides the schedule and milestones for the deployment.

3.1 Timeline

The deployment and installation are scheduled to run for 30 days starting with the day after national release.

3.2 Site Readiness Assessment

This section discusses the locations that will receive the deployment of the multi-build BPS PSO IB PSS BUNDLE 23.0 (includes BPS*1.0*35, PSO*7.0*702, IB*2.0*712, and PSS*1.0*260).

3.2.1 Deployment Topology (Targeted Architecture)

This multi-build BPS PSO IB PSS BUNDLE 23.0 (includes BPS*1.0*35, PSO*7.0*702, IB*2.0*712, and PSS*1.0*260) is to be nationally released to all VAMCs.

3.2.2 Site Information (Locations, Deployment Recipients)

The IOC sites are:

- Birmingham VAMC (521)
- Lexington VAMC – Leestown (596)
- Richmond VA Medical Center (652)
- VA Heartland – West, VISN 15 (589)

3.2.3 Site Preparation

The following table describes preparation required by the site prior to deployment.

Table 2: Site Preparation

Site / Other	Problem / Change Needed	Features to Adapt / Modify to New Product	Actions / Steps	Owner
N/A	N/A	N/A	N/A	N/A

3.3 Resources

3.3.1 Facility Specifics

The following table lists facility-specific features required for deployment.

Table 3: Facility-Specific Features

Site	Space / Room	Features Needed	Other
N/A	N/A	N/A	N/A

3.3.2 Hardware

The following table describes hardware specifications required at each site prior to deployment.

Table 4: Hardware Specifications

Required Hardware	Model	Version	Configuration	Manufacturer	Other
Existing VistA system	N/A	N/A	N/A	N/A	N/A

Please see the Roles and Responsibilities table in Section 2 for details about who is responsible for preparing the site to meet these hardware specifications.

3.3.3 Software

The following table describes software specifications required at each site prior to deployment.

Table 5: Software Specifications

Required Software	Make	Version	Configuration	Manufacturer	Other
Fully patched Electronic Claims Management Engine package within VistA	N/A	1.0	N/A	N/A	N/A
Fully patched Outpatient Pharmacy package within VistA	N/A	7.0	N/A	N/A	N/A
Fully patched Integrated Billing package within VistA	N/A	2.0	N/A	N/A	N/A
Fully patched Pharmacy Data Management package within VistA	N/A	1.0	N/A	N/A	N/A

Please see the Roles and Responsibilities table in Section 2 above for details about who is responsible for preparing the site to meet these software specifications.

3.3.4 Communications

The sites that are participating in field testing (IOC) will use the “Patch Tracking” message in Outlook to communicate with the ePharmacy eBusiness team, developers, and product support personnel.

3.3.4.1 Deployment / Installation / Back-out Checklist

The Release Management team will deploy the multi-build BPS PSO IB PSS BUNDLE 23.0, which is tracked nationally for all VAMCs in the National Patch Module (NPM) in Forum. Forum automatically tracks the patches as they are installed in the different VAMC production systems. One can run a report in Forum to identify when and by whom the patch was installed into the VistA production at each site. A report can also be run to identify which sites have not currently installed the patch into their VistA production system. Therefore, this information does not need to be manually tracked in the chart below.

Table 6: Deployment / Installation / Back-out Checklist

Activity	Day	Time	Individual who completed task
Deploy	N/A	N/A	N/A
Install	N/A	N/A	N/A
Back-out	N/A	N/A	N/A

4 Installation

4.1 Pre-installation and System Requirements

Multi-build BPS PSO IB PSS BUNDLE 23.0 is installable on a fully patched M(UMPS) VistA system and operates on the top of the VistA environment provided by the VistA infrastructure packages. The latter provides utilities that communicate with the underlying operating system and hardware, thereby providing each VistA package independence from variations in hardware and operating system.

4.2 Platform Installation and Preparation

Refer to the BPS*1.0*35 documentation on the NPM in Forum for the detailed installation instructions. These instructions include any pre-installation steps if applicable.

4.3 Download and Extract Files

Refer to the BPS*1.0*35, PSO*7.0*702, IB*2.0*712, and PSS*1.0*260 documentation on the NPM to find related documentation that can be downloaded. The patch description of each patch will be transmitted as a MailMan message from the NPM. These messages can also be pulled from the NPM. The patches themselves are bundled together into the multi-build BPS PSO IB PSS BUNDLE 23.0. The host file containing these patches must be downloaded separately. The file name is BPS_1_35_PSO_IB_PSS.KID and it can be found on the [VistA software download site](#).

4.4 Database Creation

Multi-build BPS PSO IB PSS BUNDLE 23.0 modifies the VistA database. All changes can be found on the NPM documentation for this patch.

4.5 Installation Scripts

No installation scripts are needed for multi-build BPS PSO IB PSS BUNDLE 23.0 installation.

4.6 Cron Scripts

No Cron scripts are needed for multi-build BPS PSO IB PSS BUNDLE 23.0 installation.

4.7 Access Requirements and Skills Needed for the Installation

Staff performing the installation of this multi-build will need access to FORUM's NPM to view all patch descriptions. Staff will also need access and ability to download the host file from the VistA software download site. The software is to be installed by each site's or region's

designated VA OIT IT Operations Service, Enterprise Service Lines, VistA Applications Division¹.

4.8 Installation Procedure

Detailed instructions for installing the multi-build BPS PSO IB PSS BUNDLE 23.0 (includes BPS*1.0*35, PSO*7.0*702, IB*2.0*712, and PSS*1.0*260) can be found on the patch description for BPS*1.0*35, which can be found on the NPM. Installing the multi-build BPS PSO IB PSS BUNDLE 23.0 will install all component patches (BPS*1.0*35, PSO*7.0*702, IB*2.0*712, and PSS*1.0*260).

4.9 Installation Verification Procedure

Refer to the BPS*1.0*35 documentation on the NPM for detailed installation instructions. These instructions include any post installation steps if applicable.

4.10 System Configuration

No system configuration changes are required for this patch.

4.11 Database Tuning

No reconfiguration of the VistA database, memory allocations, or other resources is necessary.

5 Back-out Procedure

Back-out pertains to a return to the last known good operational state of the software and appropriate platform settings.

5.1 Back-out Strategy

A decision to back out could be made during Site Mirror Testing, during Site Production Testing, or after National Release to the field (VAMCs). The best strategy decision is dependent on the stage during which the decision is made.

5.1.1 Mirror Testing or Site Production Testing

If a decision to back out is made during Mirror Testing or Site Production Testing, a new version of the patch can be used to restore the build components to their pre-patch condition.

5.1.2 After National Release but During the Designated Support Period

If a decision to back out is made after national release and within the designated support period, a new patch will be entered into the NPM in Forum and will go through all the necessary milestone reviews, etc. as a patch for a patch. This patch could be defined as an emergency

¹ “Enterprise service lines, VAD” for short. Formerly known as the Information Resources Management (IRM) or IT support.

patch, and it could be used to address specific issues pertaining to the original patch or it could be used to restore the build components to their original pre-patch condition.

5.1.3 After National Release and Warranty Period

After the 90-day warranty period, the VistA Maintenance Program will produce the new patch, either to correct the defective components or restore the build components to their original pre-patch condition.

5.2 Back-out Considerations

Changes implemented with multi-build BPS PSO IB PSS BUNDLE 23.0 can be backed out in their entirety or on an enhancement-by-enhancement basis. Either could be accomplished via a new version of multi-build BPS PSO IB PSS BUNDLE 23.0 if before national release or a new multi-build if after national release.

5.2.1 Load Testing

N/A. The back-out process will be executed at normal rather than raised job priority and is expected to have no significant effect on total system performance. After the reversion, the performance demands on the system will be unchanged.

5.2.2 User Acceptance Testing

Below are the acceptance criteria for each story included in BPS PSO IB PSS BUNDLE 23.0.

EPHAR-66

- Professional Service Code(s) have been updated in file BPS NCPDP PROFESSIONAL SERVICE CODE, # 9002313.21.
- Invalid Provider Data Source Code(s) have been updated in file BPS NCPDP INVALID PROVIDER DATA SOURCE, # 9002313.42.
- Reject Code(s) have been added in file BPS NCPDP REJECT CODES, File # 9002313.93.
- Updated Professional Service Code(s) can be:
 - selected when performing the OVR action from the Pharmacist Worklist.
 - selected when performing the SMA action from the Pharmacist Worklist.
- Updated Invalid Provider Data Source Code(s) can be:
 - selected in the testing tool.
 - received in a claim response and stored in VistA with the claim response (CRI).
 - displayed on the Claim Log.
 - displayed on Additional Reject Info (ARI) – accessed from WL andVP.
- When patient type is Veteran, new Reject Code can be:
 - received in a claim response and stored in VistA with the claim response.
 - displayed on the ECME User screen.

- displayed on the Rejected Claims Report and Closed Claims Report.
- displayed on the LOG Print Claim Log (ECME User Screen and VER).
- When patient type is TRICARE or CHAMPVA, new Reject Code can be:
 - received in a claim response and stored in VistA with the claim response.
 - displayed on the ECME User screen.
 - displayed on the Pharmacists' Worklist.
 - displayed on the Pharmacists' View/Process (VP).
 - displayed on the Reject Notification screen.
 - displayed on the Reject Information screen.
 - displayed on the Rejected Claims Report and Closed Claims Report.
 - displayed on the LOG Print Claim Log (ECME User Screen and VER).

EPHAR-2509

- File BPS NCPDP PATIENT RELATIONSHIP CODE #9002313.19 contains a new inactive field.
- File BPS NCPDP PROFESSIONAL SERVICE CODE #9002313.21 contains a new inactive field.
- File BPS NCPDP RESULT OF SERVICE CODE #9002313.22 contains a new inactive field.
- File BPS NCPDP REASON FOR SERVICE CODE #9002313.23 contains a new inactive field.
- File BPS NCPDP DAW CODE #9002313.24 contains a new inactive field.
- File BPS NCPDP CLARIFICATION CODE #9002313.25 contains a new inactive field, and the field is valued for sunset/inactive ECL code values.
- File BPS NCPDP PRIOR AUTHORIZATION TYPE CODE #9002313.26 contains a new inactive field, and the field is valued for sunset/inactive ECL code values.
- File BPS NCPDP PHARMACY SERVICE TYPE #9002313.28 contains a new inactive field.
- File BPS NCPDP DELAY REASON CODE #9002313.29 contains a new inactive field.
- When the user performs RED Resubmit with Edit and enters ?, inactive values are suppressed and do not display to the user.
- When the user performs Back Billing or resubmit using SE Submit Claim to ECME from Claims Tracking and enters ?, inactive values are suppressed and do not display to the user.
- When the user edits an order on the OP Medications Screen and enters ? for a field that contains an inactive value, it is suppressed and does not display to the user.

- When the user performs CLA Submit Clarification Code and enters ?, inactive values are suppressed and do not display to the user.
- When the user performs SMA Submit Multiple Actions and enters ? for fields that have inactive values, they are suppressed and do not display to the user.
- When the user performs OVR Submit Override Codes and enters ? for fields that have inactive values, they are suppressed and do not display to the user.
- When the user performs PA Submit Prior Authorization and enters ?, inactive values are suppressed and do not display to the user.
- If the user enters an inactive/sunset code, the system should not accept the value.
- Inactive/sunset codes cannot be entered in the Testing Tool.
- Display of historic data is not impacted. Regression

EPHAR-2514

- Inactive ECL values for OTHER COVERAGE CODE in Files 9002313.59 and 9002313.77 include the ZZ prefix.
- Inactive ECL values for OTHER PAYER COVERAGE TYPE in Files 9002313.5914 and 9002313.778 include the ZZ prefix.
- When the user performs RED Resubmit with Edit on secondary insurance and enters ?, inactive values for OTHER COVERAGE CODE are suppressed and do not display to the user. (regression)
- When the user performs PRO Process Secondary/TRICARE Rx to ECME and enters ?, inactive values for OTHER COVERAGE CODE are suppressed and do not display to the user. (regression)

EPHAR-2668

- A claim for a dual-eligible patient can be resubmitted using the RED, RES, or RER action and the messages below do not appear.
 - TRICARE coverage for a Veteran
 - Not Processed:
 - TRICARE coverage for a Veteran
- When the TRICARE dual-eligible claim is resubmitted using the RED, RES, or RER action, the coordination of benefit (e.g. primary or secondary), Rate Type, and insurance company on the resubmitted claim should be the same as what was selected when the previous claim was submitted.
- When the CHAMPVA dual-eligible claim is resubmitted using the RED, RES, or RER action, the coordination of benefit (e.g. primary or secondary), Rate Type, and insurance company on the resubmitted claim should be the same as what was selected when the previous claim was submitted.

- The claim transmits the appropriate values when claim fields are edited using the RED hidden action.
- When the Veteran eligible claim is resubmitted using the RED, RES, or RER action, the coordination of benefit (e.g. primary or secondary), Rate Type, and insurance company on the resubmitted claim should be the same as what was selected when the previous claim was submitted. Regression

EPHAR-2780

- The “Reject Received” date is displayed above the Reject Type (reject code and description).
- The reject code plus the reject code description within 62 characters are not truncated.
- When the reject code plus the reject code description are over 62 characters, it is truncated and will display three periods (...) at the end to signify the description is truncated.

EPHAR-3043

- When a claim is resubmitted from the ECME User Screen, and the same non-billable reason has not been resolved, the system will close the original eT/eC reject and put another eT/eC reject on the prescription for the same reason, which will be reflected in the ECME Log, Reject Log, and Pharmacist Worklist.
- When a claim is resubmitted from the ECME User Screen, and the first non-billable reason has been addressed and a different non-billable reason exists, the system will close the original eT/eC reject and put another eT/eC reject on the prescription for the new reason, which will be reflected in the ECME Log, Reject Log, and Pharmacist Worklist.
- When a claim is resubmitted from the Pharmacist Worklist, and the same non-billable reason has not been resolved, the system will close the original eT/eC reject and put another eT/eC reject on the prescription for the same reason, which will be reflected in the ECME Log, Reject Log, and ECME User Screen.
- When a claim is resubmitted from the Pharmacist Worklist, and the first non-billable reason has been addressed and a different non-billable reason exists, the system will close the original eT/eC reject and put another eT/eC reject on the prescription for the new reason, which will be reflected in the ECME Log, Reject Log, and ECME User Screen.
- When suspense processing runs and a prescription has an open / unresolved eT/eC reject, then the system:
 - does not resubmit the claim
 - does not send the Rx to CMOP/OPAI
 - leaves the Rx on the suspense queue
- When suspense processing runs and a prescription has only closed / resolved eT/eC rejects, then the system:
 - does not resubmit the claim
 - sends the Rx to CMOP/OPAI

5.3 Back-out Criteria

It may be decided to back out this patch if the project is canceled, the requested changes implemented by multi-build BPS PSO IB PSS BUNDLE 23.0 are no longer desired by VA OIT and the ePharmacy eBusiness team or the patch produces catastrophic problems.

5.4 Back-out Risks

Since the ePharmacy software is tightly integrated with external systems, any attempt at a back-out should include close consultation with the external trading partners such as the Financial Services Center (FSC) and the Health Care Clearing House (HCCH) to determine risk.

5.5 Authority for Back-out

Any back-out decision should be a joint decision of the Business Owner (or their representative) and the Program Manager with input from the Health Services Portfolio (HSP) Application Coordinator, developers (both project and Tier 3 HSP), and if appropriate, external trading partners such as the VA FSC or Change Healthcare.

5.6 Back-out Procedure

The back-out plan for VistA applications is complex and not a “one size fits all” solution. The general strategy for a VistA back-out is to repair the code with a follow-up patch. The development team recommends that sites log a ticket if it is a nationally released patch.

If it is prior to national release, the site will be already working directly with the development team daily and should contact that team. The development team members will have been identified in the Initial Operating Capability (IOC) Memorandum of Understanding (MOU). As discussed in section 5.2, it is likely that development team can quickly address via a new software version. If the site is unsure whom to contact, they may log a ticket or contact Health Services Portfolio.

Multi-build BPS PSO IB PSS BUNDLE 23.0 contains the following build components:

- Routines
- Data Dictionaries

While the VistA KIDS installation procedure allows the installer to back up the modified routines using the ‘Backup a Transport Global’ action, the back-out procedure for global, data dictionary, and other VistA components is more complex and requires issuance of a follow-up patch to ensure all components are properly removed, restored, or both. All software components (routines and other items) must be restored to their previous state at the same time and in conjunction with the restoration of the data.

Please contact the Software Product Management (SPM) team for assistance since this installed patch contains components in addition to routines.

5.7 Back-out Verification Procedure

Successful back-out is confirmed by verification that the back-out patch was successfully implemented. This includes successful installation and testing that the back-out acts as expected, as defined together with the team the site contacted in section 5.5.

6 Rollback Procedure

Rollback pertains to data. The data changes in this patch are specific to the operational software and platform settings. These data changes are covered in the Back-out procedures detailed elsewhere in this document.

6.1 Rollback Considerations

Not applicable.

6.2 Rollback Criteria

Not applicable.

6.3 Rollback Risks

Not applicable.

6.4 Authority for Rollback

Not applicable.

6.5 Rollback Procedure

Not applicable.

6.6 Rollback Verification Procedure

Not applicable.